

Title (en)

PROCESS FOR THE PRODUCTION OF METHACRYLIC ACID FROM ISOBUTYRALDEHYDE

Publication

EP 0079432 B1 19841024 (DE)

Application

EP 82107737 A 19820824

Priority

DE 3142487 A 19811027

Abstract (en)

[origin: ES8306697A1] To produce methacrylic acid, firstly, isobutyraldehyde is acetalized. The resultant acetal is cleaved into the isobutetyl ether and alcohol. The isobutetyl ether is oxidized with molecular oxygen or an oxygen-containing gaseous mixture in the presence of an alkaline solution at temperatures of 30 DEG -70 DEG C. to obtain the epoxide. This epoxide is hydrolyzed to the alpha -hydroxyisobutyraldehyde. The latter is then oxidized with concentrated or fuming nitric acid at temperatures of 20 DEG -110 DEG C. to produce alpha -hydroxyisobutyric acid, and methacrylic acid is obtained therefrom by splitting off water.

IPC 1-7

C07C 57/04; C07C 51/00

IPC 8 full level

C07C 41/28 (2006.01); **C07C 41/56** (2006.01); **C07C 45/51** (2006.01); **C07C 45/58** (2006.01); **C07C 51/00** (2006.01); **C07C 51/27** (2006.01);
C07C 57/04 (2006.01); **C07C 57/05** (2006.01); **C07C 57/065** (2006.01); **C07C 67/00** (2006.01); **C07D 303/48** (2006.01)

CPC (source: EP US)

C07C 41/28 (2013.01 - EP US); **C07C 41/56** (2013.01 - EP US); **C07C 45/513** (2013.01 - EP US); **C07C 45/58** (2013.01 - EP US);
C07C 51/27 (2013.01 - EP US); **C07D 303/48** (2013.01 - EP US)

Cited by

EP0150280A3

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL

DOCDB simple family (publication)

EP 0079432 A1 19830525; EP 0079432 B1 19841024; AT E9991 T1 19841115; CA 1183866 A 19850312; DE 3142487 A1 19830505;
DE 3261071 D1 19841129; ES 516821 A0 19830616; ES 8306697 A1 19830616; JP S5879948 A 19830513; US 4469887 A 19840904

DOCDB simple family (application)

EP 82107737 A 19820824; AT 82107737 T 19820824; CA 414217 A 19821026; DE 3142487 A 19811027; DE 3261071 T 19820824;
ES 516821 A 19821026; JP 18687882 A 19821026; US 43676882 A 19821026